

ORDINANCE

AN ORDINANCE TO AMEND ARTICLE IV OF THE FAUQUIER COUNTY ZONING ORDINANCE TO ADD AQUIFER PROTECTION OVERLAY DISTRICT

WHEREAS, the public water supply system for Fauquier County is served by a number of wells providing water to the citizens of Fauquier County; and

WHEREAS, protection of the aquifers which supply groundwater for the public water supply system in Fauquier County is of the utmost importance; and

WHEREAS, as public water supplies are identified it is necessary to protect the aquifers from contamination; now, therefore, be it

ORDAINED by the Board of Supervisors of Fauquier County this ____ day of _____ 2003, That Article 4 of the Fauquier County Zoning Ordinance be, and is hereby, amended to add Part 8 entitled “Aquifer Protection Overlay District Ordinance”, which Ordinance shall read as hereinafter set forth:

Part AQUIFER PROTECTION OVERLAY DISTRICT ORDINANCE

4-____. Background

This water resource protection ordinance is intended to assist Fauquier County to protect the drinking water supplies of its service districts and citizens from contamination and depletion due to the inappropriate use of land. This ordinance is designed to protect groundwater resources by identifying sensitive aquifer and wellhead protection areas and by establishing appropriate regulations within those areas. The ordinance is intended to supplement the county’s stormwater management and best management practices ordinances, two elements that are essential to groundwater protection.

4-____ Purpose and Intent:

01.1 It is the purpose of this ordinance to protect water resources in order to:

(a) protect the public health, safety, and welfare of the residents of Fauquier County through the preservation of the county's groundwater resources;

(b) identify uses that are prohibited or allowed only by special permit or special exception within designated aquifer protection overlay districts;

(c) protect groundwater and surface water resources from contamination and pollution;

(d) complement the Commonwealth's Department of Environmental Quality's regulations governing groundwater protection; and

(e) protect other sensitive water resource areas, including those land areas that contribute recharge to public or private drinking water supply wells.

02.0 Definitions: As used in this ordinance, the following words and terms shall have the meanings specified herein:

02.1 "Aquifer Protection Overlay District" (APOD) means those land area(s) designated on a map adopted pursuant to this ordinance that provide recharge to an existing or planned public drinking water supply well. An APOD shall be designated only after geo-technical and/or hydrological study determines the area is a recharge area for an aquifer.

02.2 "Development" means the construction, reconstruction, conversion, structural alteration, relocation, or enlargement of any structure; any mine, excavation, landfill, or land disturbance; and/or any change in use, or alteration or extension of the use, of land.

0.2.3 "Hazardous Material" means any: chemical; combustible liquid; compressed gas; explosive; flammable aerosol, gas, liquid or solid; hazardous chemical; health hazard; mixture; organic peroxide, oxidizer; physical hazard; pyrophoric; unstable (reactive) or water reactive, as defined under Title 29 of the Code of Federal Regulations, Section 1910.1200(c) and any other chemical, material or substance identified by the County of Fauquier as hazardous based on available scientific evidence. This includes, but is not limited to, petroleum products, solvents, oil-based paint and pesticides. Hazardous materials do not include: hazardous wastes, tobacco products, wood products, foods, drugs, alcoholic beverages, cosmetics and any hazardous material used by employees in the workplace in household quantities as defined below.

02.4 "Hazardous Waste" means any waste material as defined in the Virginia Department of Environmental Quality Hazardous Waste Regulations and the County Code. This includes, but is not limited to, waste oil, waste solvents, waste oil-based paint, and waste pesticides.

02.5 "Hazardous Material or Waste, Household Quantity" means any or all of the following:

(a) 275 gallons or less of oil on site at any time to be used for heating of a structure or to supply an emergency generator, and

(b) 25 gallons (or the dry weight equivalent) or less of other hazardous materials on site at any time, including oil not used for heating or to supply an emergency generator, and

(c) a quantity of hazardous waste at the Very Small Quantity Generator level as defined in the Virginia Department of Environmental Quality Hazardous Waste Regulations.

02.5 "Lot" means either: (a) the basic development unit for determination of lot area, depth, and other dimensional variations; or (b) a parcel of land whose boundaries have been established by some legal instrument, such as a recorded deed or recorded plan, and is recognized as a separate legal entity for purposes of transfer of title.

02.6 "Nitrogen management" means the process of ensuring that nitrogen generated by land uses does not exceed established capacities of the resources receiving nitrogen inputs.

02.7 "Overlay district" means a district that is superimposed over one or more zoning districts or parts of districts and that imposes specified requirements that are in addition to those otherwise applicable for the underlying zone.

02.8 "Subdivision" means the division or re-division of a lot, tract, or parcel of land into two or more lots, tracts, or parcels in accordance with the Code of Virginia and the Fauquier County Subdivision Ordinance.

03.0 Applicability:

03.1 All developments located within a designated aquifer protection overlay district (APOD) designated pursuant to Section 04.0 below shall meet the requirements of this ordinance.

03.2 Where this ordinance is less strict or where this ordinance is silent as to a particular issue, then all developments shall instead conform to the requirements of the underlying zoning district(s) in which the developments are located.

04.0 Designation of APOD; Establishment of Map; Appeal of APOD Designation:

04.1 An APOD, as designated herein, includes those areas that require water resource protection in order to protect aquifer recharge areas.

04.2 The boundaries of an APOD shall be based upon a delineation of aquifer protection areas, as well as other hydrologic and/or hydrogeologic data and analysis completed by a groundwater hydrologist or other person who by education, training, and experience, is qualified in such regard.

04.3 The APOD boundaries shall be depicted on a reproducible map entitled "Aquifer Protection Overlay District, County of Fauquier" that shall be incorporated herein by reference and shall be drawn to an appropriate scale.

04.4 The APOD boundaries shall be considered to be superimposed over any other zoning district established by the zoning ordinance and shall be indicated as such on the zoning map.

04.5 Where the boundary line of the APOD divides a lot, the requirements established by this ordinance shall apply only to the portion of the lot that is located within the APOD.

05.0 Uses Prohibited Within APODs:

05.1 The following uses and activities shall be prohibited within any APOD:

- (a) landfills, public or private, and landfilling of sludge or septage;
- (b) manufacturing and production of paving, roofing, and other construction materials using petroleum-based coating and preserving materials;
- (c) sewage treatment facilities, public or private, with on-site disposal of effluent, unless tertiary treated and needed to remediate existing on-site contamination;
- (d) airports, boat, truck, and bus terminals or stations;
- (e) gasoline stations, automotive service stations and car washes;
- (f) floor drains which discharge to the ground;
- (g) dry cleaning establishments;
- (h) road salt stockpiles;
- (i) dumping of snow from outside the APOD;
- (j) any use which involves the use, treatment, generation, storage or disposal of hazardous wastes or hazardous materials in greater than household quantities;
- (k) underground storage tanks;
- (l) removal of soil or ground cover within four (4) feet of maximum high groundwater;
- (m) areas for disposal of automobiles, "junkyards," salvage yards or the like;

(n) list other uses or activities that withdraw large volumes of groundwater for manufacturing or consumption, and uses that generate large volumes of sewage (i.e. greater than 2,000 gpd).

06.0 Uses Allowed Within APODs, Subject to Special Permit:

06.1 The following uses and activities located within an APOD shall require a special permit from the Board of Zoning Appeals:

- (a) any subdivision of land into 7 or more lots;
- (b) the construction of 8 or more dwelling units, whether on one or more contiguous lots, tracts, or parcels, or whether contained within one or more structures;
- (c) any nonresidential use of 40,000 square feet or greater in either lot size or gross floor area;
- (d) any construction that renders an area 10,000 square feet or greater of impervious surface;
- (e) any use which disposes of greater than 2,000 gallons per day of wastewater, unless connected to a public wastewater treatment facility;

07.0 General Exemptions:

07.1 The following uses and activities shall be exempted from the requirements of Section 06.0 above and may be located within an APOD without a special permit:

- (a) Continuous Transit. The transportation of hazardous wastes or materials, provided that the transporting motor vehicle is in continuous transit;
- (b) Vehicular and Lawn Maintenance Fuel and Lubricant Use. The use in a vehicle or lawn maintenance equipment of any hazardous material solely as fuel or lubricant in that vehicle or equipment fuel tank;
- (c) Retail/Wholesale Sales/Office/Commercial Uses that store or handle hazardous materials or wastes in amounts that do not exceed household quantities.
- (d) Construction Activities. The activities of constructing, repairing, or maintaining any building or structure on lands located within an APOD, provided that all contractors, subcontractors, laborers, material men, and their employees use those applicable Best Management Practices when using, handling, storing, or producing any hazardous materials or wastes.

(e) Household Use. The household use of hazardous materials or wastes in amounts that do not exceed household quantities.

(f) Governmental Use. The governmental use of hazardous materials and any materials stored and used for the sole purpose of water supply treatment; and

(g) Storage of Oil(s). The storage of oil(s) used for heating fuel, provided that the container used for such storage shall be located within an enclosed structure that is sufficient to preclude leakage of oil to the external environment and to afford routine access for visual inspection and shall be sheltered to prevent the intrusion of precipitation.

08.0 Criteria for Special Permit Approval; Design and Operating Guidelines:

Therefore, as a condition of granting a special permit for uses and activities identified in Section 0.60 above, the Board of Zoning Appeals may require adherence to any or all of the following design and operation guidelines, where, in its opinion, such adherence would further the purposes of this ordinance.

(a) Containment of Regulated Substances. Leak-proof trays under containers, floor curbing, or other contaminant systems to provide secondary liquid containment shall be installed. The containment shall be of adequate size to handle all spills, leaks, overflows, and precipitation until appropriate action can be taken. The specific design and selection of materials shall be sufficient to preclude any loss to the external environment. Containment systems shall be sheltered so that the intrusion of precipitation is effectively prevented. The owner/operator may choose to provide adequate and appropriate liquid collection methods rather than sheltering only after approval of the design by the permit-granting authority. These requirements shall apply to all areas of use, production, and handling, to all storage areas, to loading and off-loading areas, and to both aboveground and underground storage areas.

(b) Emergency Plan. An emergency plan shall be prepared and filed along with the special permit application that indicates the procedures that will be followed in the event of the spillage of any hazardous material or waste so as to control and collect all such spilled material in such a manner and prevent it from reaching any storm or sanitary drains or the groundwater.

(c) Inspection. Each day of operation, a responsible person designated by the permittee who stores, handles, uses, or produces any hazardous materials or waste shall check for breakage or leakage of any container holding such materials or waste. Electronic sensing devices may be employed as part of the inspection process, if approved by the permit-granting authority and provided that the sensing system is also checked daily for malfunctions. The manner of daily inspection shall not necessarily require the actual physical inspection of each container, provided that the location of the containers can be inspected to a degree that reasonably assures the permit-

granting authority that breakage or leakage can be detected by the inspection. Monitoring records shall be kept daily and made available to the permit granting authority on a quarterly basis.

(d) **Reporting of Spills.** Any spill shall be reported by telephone to the Fauquier County Department of Fire and Rescue, and to the Virginia Department of Environmental Quality, as necessary, within one hour of discovery of the spill. Clean up shall commence immediately upon discovery of the spill. A full written report that includes a description of the steps taken to contain and clean up the spill shall be submitted to the Fauquier County Department of Fire and Rescue, and to the Virginia Department of Environmental Quality within 15 days of discovery of the spill.

(e) **Monitoring of Regulated Substances in Groundwater Monitoring Wells.** If required by the Board of Zoning Appeals, groundwater monitoring well(s) shall be provided at the expense of the permittee in a manner, number, and location approved by the permit granting authority. Except for existing wells found by the Board of Zoning Appeals to be adequate for this provision, the required well(s) shall be installed by a water well contractor. Samples shall be analyzed and analytical reports that describe the quantity of any hazardous material or waste present in each monitoring well shall be prepared by a certified laboratory.

(t) **Expansions, Alterations and Modifications.** The Board of Zoning Appeals shall be notified in writing prior to the expansion, alteration, or modification of a use or activity holding a special permit under this ordinance. Such expansion, alteration, or modification may result from increased square footage of production or storage capacity, or increased quantities of hazardous materials or wastes, or changes in types of materials or wastes beyond those square footages, quantities, and types upon which the permit was issued. The introduction of any new hazardous waste or material shall not prevent the revocation or revision of any existing special permit if, in the opinion of the Board of Zoning Appeals, such introduction substantially or materially modifies, alters, or affects the conditions upon which the existing special permit was granted or the ability to remain qualified as a General Exemption under Section 07.0 above, if applicable, or to continue to satisfy any conditions that have been imposed as part of a special permit, if applicable.

09.0 Performance Standards: Nitrogen Management:

09.1 Land uses and developments within APODs shall conform to the following performance standards for nitrogen management. These performance standards shall be considered as criteria for the grant of a special permit.

(a) No land use or development regulated by this ordinance shall exceed a 5ppm nitrogen-loading standard;

(b) Any permissible land use or development within an APOD, not precluded by paragraph (1), above, shall not exceed a 5-mg/l nitrogen loading standard for impact on groundwater. For the purposes of calculating nitrogen generation, the following standards shall be used:

1. nitrogen from dwelling units that use septic systems (assuming three persons per dwelling): 35 mg/l

2. nitrogen from lawn fertilizers: three pounds per 1,000 square feet (25 % leached)

3. nitrogen in background precipitation: 0.05 mg/l

4. runoff from roads and ways: 1.50 mg/l

5. runoff from roofs: 0.75 mg/l

6. other land uses as allowed by zoning:

10.0 Performance Standards: Stormwater Management:

10.1 Land uses and developments within APODs that require a special permit pursuant to Section 06.0 above, shall conform to the following performance standards for stormwater management. These performance standards shall be considered as the criteria for the grant of a special permit.

(a) No development shall result in a direct discharge of untreated stormwater, either on or offsite.

(b) Post development discharge rates shall not be greater than predevelopment discharge rates.

(c) New development shall maximize recharge to groundwater.

(d) New development shall be required to remove, onsite, no less than 80% of the annual total suspended solids generated from development runoff.

(e) Best management practices shall be maintained for appropriate periods of time.

11.0 Pre application Conference Requirement:

11.1 Timing. Prior to the submission of an application for a special permit under this ordinance, the, applicant is strongly encouraged to meet with the staff of the Fauquier County Department of Community Development to discuss the proposed development in general terms and establish the plan filing requirements.

12.0 Special Permit Filing Requirements:

12.1 Plan Filing Requirements. Unless determined by the Board of Zoning Appeals that some of the information is not necessary to reach a decision on the merits of the special permit application, the following plans/items shall be submitted for development within an APOD.

(a) Nitrogen Management. The applicant shall provide an analysis of the impact of the proposed development demonstrating compliance with the requirements of Section 09.0 (1)(b).

(b) Stormwater Management. The applicant shall provide a narrative and, if relevant, a quantitative analysis of how the proposed project complies with the performance standards for stormwater management set forth in Section 11.0. The analysis shall be prepared by a professional engineer registered in the Commonwealth. The analysis shall set forth in detail best management practices designed to mitigate the impacts of stormwater runoff.

13.0 Severability:

13.1 If any provision of this ordinance is held invalid by a court of competent jurisdiction, the remainder of the ordinance shall not be affected thereby. The invalidity of any section or sections or parts of any section or sections of this by law shall not affect the validity of the remainder of the County's zoning ordinance.

EXHIBIT A

EXHIBIT SAMPLE HAZARDOUS MATERIALS LIST

Acid and basic cleaning solutions, antifreeze and coolants
Arsenic and arsenic compounds, bleaches, peroxides
Brake and transmission fluids, brine solution
Casting and foundry chemicals, caulking agents and sealants, cleaning solvents
Corrosion and rust prevention solutions, cutting fluids
Degreasing solvents, disinfectants
Electroplating solutions, explosives, fertilizers
Fire extinguishing chemicals, food processing wastes
Formaldehyde
Fuels and additives, gasoline
Glues, adhesives, and resins
Greases
Hydraulic fluid
Indicators
Industrial and commercial janitorial supplies, industrial sludge and stillbottoms
Inks, printing and photocopying chemicals, laboratory chemicals
Liquid storage batteries
Medical, pharmaceutical, dental, veterinary, and hospital solutions, mercury and mercury compounds
Metals finishing solutions
Oils, paints, primers, thinners, dyes, stains, wood preservatives, varnishing, and cleaning compounds,
Painting solvents
PCBs
Pesticides and herbicides
Plastic resins, plasticizers and catalysts, photo development chemicals, poisons, polishes
Pool chemicals in concentrated form, processed dust and particulates, radioactive sources
Reagents and standards refrigerants
Roofing chemicals and sealers
Sanitizers, disinfectants, bactericides, and algacides, soaps, detergents, and surfactants solders and fluxes
Stripping compounds
Tanning industry chemicals
Transformer and capacitor oils/fluids
Water and wastewater treatment chemicals

EXHIBIT B

"BEST MANAGEMENT PRACTICES" FOR THE CONSTRUCTION INDUSTRY

- (A) The general contractor or, if none, the property owner, shall be responsible for ensuring that each contractor or subcontractor evaluates each site before construction is initiated to determine if any site conditions may pose particular problems for the handling of any hazardous material or waste. For instance, handling a hazardous material or waste in the proximity of water bodies or wetlands may be improper.
- (B) If any hazardous material or wastes are stored on the construction site during the construction process, they shall be stored in a location and manner that will minimize any possible risk of release to the environment. Any storage container of greater than 25 gallons, or 440 pounds, or more, containing hazardous material or wastes shall have constructed below it an impervious containment system constructed of materials of sufficient thickness, density, and composition that will prevent the discharge to the land, groundwater, or surface waters, of any pollutant that may emanate from said storage container or containers. Each containment system shall be able to contain 150% of the contents of all storage containers above the containment system.
- (C) Each contractor shall familiarize him/herself with the manufacturer's safety data sheet supplied with each material containing a hazardous material or waste and shall be familiar with procedures required to contain and clean up any releases of the hazardous material or waste. Any tools or equipment necessary to accomplish same shall be available in case of a release.
- (D) Upon completion of construction, all unused hazardous material or waste and containment systems shall be removed from the construction site by the responsible contractor and shall be disposed of in a proper manner as prescribed by law.